

## Appendix A

### Biographical Sketches of Members of the Committee on Review of the USGS National Streamflow Information Program

**David R. Maidment**, *chair*, is the Ashley H. Priddy Centennial Professor of Engineering and director of the Center for Research in Water Resources at the University of Texas at Austin. He is an acknowledged leader in the application of geographic information systems (GIS) to hydrologic modeling. His current research involves the application of GIS to flood-plain mapping, water quality modeling, water resources assessment, hydrologic simulation, surface water-groundwater interaction, and global hydrology. He is the coauthor of *Applied Hydrology* (McGraw-Hill, 1988) and the editor-in-chief of *Handbook of Hydrology* (McGraw-Hill, 1993). From 1992 to 1995 he was editor of the *Journal of Hydrology*, and he is currently an associate editor of that journal and of the *Journal of Hydrologic Engineering*. He received his B.S. degree in agricultural engineering from the University of Canterbury, Christchurch, New Zealand, and his M.S. and Ph.D. degrees in civil engineering from the University of Illinois at Urbana-Champaign.

**A. Allen Bradley, Jr.** is an associate professor of civil and environmental engineering at the University of Iowa and a research engineer at IIHR Hydrosience & Engineering. His research interests are in the areas of hydrology and hydrometeorology, including flood and drought hydrology, hydroclimate forecasting, and water resource applications of remote sensing. He received his B.S. in civil engineering from Virginia Tech, an M.S. in civil engineering from Stanford University, and a Ph.D. in civil and environmental engineering from the University of Wisconsin.

**Benedykt Dziegielewski** is professor of geography at Southern Illinois University at Carbondale and executive director of the International

Water Resources Association. His two main research areas are water demand management (urban water conservation planning and evaluation, water demand forecasting, modeling of water use in urban sectors) and urban drought (drought planning and management; measurement of economic, social, and environmental drought impacts). He is editor-in-chief of *Water International* and is an honorary lifetime member of the Water Conservation Committee of the American Water Works Association. He received his B.S. and M.S. in environmental engineering from Wroclaw Polytechnic University, Wroclaw, Poland, and his Ph.D. in geography and environmental engineering from Southern Illinois University.

**Richard Howitt** is professor of economics at the University of California-Davis. Dr. Howitt's research focuses on resource and environmental economics, quantitative methods, and econometrics. His interests include developing calibration methods based on maximum entropy estimators to model the economic structure of resource use from disaggregated physical data, including remote sensing methods, to infer the underlying economic functions. Much of his research has focused on California's water resources, including water markets in the San Joaquin Valley and the Westlands Water District. He has published in such areas as river water quality, water use, water management, and water institutions. Dr. Howitt received his Ph.D. and M.S. degrees in economics from the University of California-Davis.

**N. LeRoy Poff** is an associate professor in the Biology Department of Colorado State University. Dr. Poff received a B.A. in biology from Hendrix College, an M.S. in environmental sciences from Indiana University in Bloomington, and a Ph.D. in biology from Colorado State University. His primary research interests are in stream and aquatic ecology and in quantifying the responses of riverine ecosystems to natural and altered hydrologic regimes, from local to watershed to regional scales. Dr. Poff has served as a member of the Adaptive Management Forum for CALFED river restoration projects, the Scientific Review Team for the King County (Seattle, WA) Normative Flows Project, the Scientific and Technical Advisory Committee for American Rivers, and the Scientific Advisory Board of the David H. Smith Conservation Research Fellowship Program for The Nature Conservancy. He is also an Aldo Leopold Leadership Fellow of the Ecological Society of America.

**Karen L. Prestegard** is an associate professor of geology at the University of Maryland. Her research interests include sediment transport and

depositional processes in mountain gravel-bed streams; mechanisms of streamflow generation and their variations with watershed scale, geology, and land use; hydrologic behavior of frozen ground; hydrologic consequences of climate change; and hydrology of coastal and riparian wetlands. She was a member of the National Research Council (NRC) Committee for Yucca Mountain Peer Review: Surface Characteristics, Preclosure Hydrology, and Erosion. She received her B.A. in geology from the University of Wisconsin-Madison, and her M.S. and Ph.D. in geology from the University of California, Berkeley.

**Stuart S. Schwartz** is director of the Center for Environmental Science, Technology, and Policy at Cleveland State University (CSU). Before joining CSU, Dr. Schwartz served as associate director of the Water Resources Research Institute of the University of North Carolina. Previously, Dr. Schwartz served as an associate hydrologic engineer at the Hydrologic Research Center in San Diego, California, and directed the Section for Cooperative Water Supply Operations on the Potomac at the Interstate Commission on the Potomac River Basin. Dr. Schwartz's research and professional interests are in the application of probabilistic hydrologic forecasting and multiobjective decision making in risk-based water resources management, watershed management, and water supply systems operations. He received his B.S. and M.S. in biology-geology from the University of Rochester and a Ph.D. in systems analysis from the Johns Hopkins University.

**Donald I. Siegel** is a professor of geology at Syracuse University, where he teaches graduate courses in hydrogeology and aqueous geochemistry. He holds B.S. and M.S. degrees in geology from the University of Rhode Island and Pennsylvania State University, respectively, and a Ph.D. in hydrogeology from the University of Minnesota. His research interests are in solute transport at both local and regional scales, wetland-groundwater interaction, and paleohydrogeology. He was a member of two NRC committees: Committee on Techniques for Assessing Ground Water Vulnerability and Committee on Wetlands Characterization.

**Mary W. Stoertz** is an associate professor of hydrogeology at Ohio University, Department of Geological Sciences. Her area of specialty is stream restoration, especially restoration of channelized rivers and streams polluted by acid mine drainage. She founded the Appalachian Watershed Research Group at Ohio University, which has the mission of restoring desired functions of watersheds subject to mining, sedimentation, and flooding. She directs the multidisciplinary research arms of the Monday Creek

Restoration Project and the Raccoon Creek Improvement Committee. Dr. Stoertz received her B.S. in geology from the University of Washington and her M.S. and Ph.D. in hydrogeology (with a minor in civil and environmental engineering) from the University of Wisconsin-Madison.

**David G. Tarboton** is professor, Utah Water Research Laboratory and Department of Civil and Environmental Engineering, Utah State University. His research interests are in spatially distributed hydrologic modeling, applying digital elevation data and GIS in hydrology, stochastic hydrology using nonparametric techniques, snow hydrology, geomorphology, landform evolution and channel networks, and terrain stability mapping and stream sediment inputs. He is a member of the American Geophysical Union, American Society of Civil Engineers, and American Water Resources Association and is a registered professional engineer (Utah). Dr. Tarboton received his B.S. in civil engineering from the University of Natal in Durban, South Africa, in 1981, and an M.S. and Sc.D. in civil engineering from the Massachusetts Institute of Technology in 1987 and 1990, respectively.

**Kay D. Thompson** is a consultant. In her research she investigates properties of subsurface materials for groundwater studies, develops methods for subsurface characterization, assesses the risks of hydrologic dam failure, and consults on minimizing environmental impacts during development. Dr. Thompson received a B.S. in civil engineering and operations research in 1987 from Princeton University, an M.S. in 1990 from Cornell University, and a Ph.D. in 1994 in civil and environmental engineering from the Massachusetts Institute of Technology. Dr. Thompson was formerly an assistant professor at Washington University, Department of Civil Engineering.